

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/13171

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B24B49/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B24B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/115380 A1 (YAMANE AKIHIKO ET AL) 22 August 2002 (2002-08-22) paragraph '0012! paragraph '0056! paragraph '0081! paragraph '0083! - paragraph '0085! paragraph '0100! figure 1	1, 4, 9
Y A	---	10 5-7, 11, 18, 24
	--- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

20 January 2004

Date of mailing of the international search report

28/01/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Krametz, E

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/13171

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 672 091 A (TAKAHASHI TSUTOMU ET AL) 30 September 1997 (1997-09-30) column 1, line 66 -column 2, line 15 column 3, line 44 -column 4, line 59 figure 1	10
A	---	15,16, 20-22
A	EP 1 022 093 A (APPLIED MATERIALS INC) 26 July 2000 (2000-07-26) paragraph '0035! claim 1; figure 2	1,3,5, 10,11, 18,24
A	--- US 2002/022936 A1 (STANKE FRED E) 21 February 2002 (2002-02-21) paragraph '0016! claim 1	11,18,24
A	--- US 2002/013120 A1 (WISWESSER ANDREAS NORBERT ET AL) 31 January 2002 (2002-01-31) paragraph '0009! - paragraph '0014! figure 2	1,3,5, 10,11, 15,18, 21,24

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/JP 03/13171

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2002115380	A1	22-08-2002	JP	2002198342 A	12-07-2002
			JP	2003168667 A	13-06-2003
US 5672091	A	30-09-1997	JP	8174411 A	09-07-1996
EP 1022093	A	26-07-2000	US	6247998 B1	19-06-2001
			US	6190234 B1	20-02-2001
			EP	1022093 A2	26-07-2000
			JP	2000326220 A	28-11-2000
			KR	2000053602 A	25-08-2000
			TW	436377 B	28-05-2001
			US	6607422 B1	19-08-2003
			US	2001027080 A1	04-10-2001
US 2002022936	A1	21-02-2002	AU	9500001 A	25-02-2002
			EP	1311831 A2	21-05-2003
			WO	0214844 A2	21-02-2002
US 2002013120	A1	31-01-2002	US	6296548 B1	02-10-2001
			US	6280289 B1	28-08-2001
			JP	2002529686 T	10-09-2002
			TW	472310 B	11-01-2002
			WO	0026613 A1	11-05-2000
			US	2001036793 A1	01-11-2001